

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SCOTT ANTHONY MORGAN, DAVID JOHN ROBERTS,
CRAIG ARDNER SWEARINGEN
AND ALAN RICHARD TANNENBAUM

Appeal No. 2002-2025
Application No. 09/213,858

ON BRIEF

MAILED

MAR 31 2004

PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before BARRETT, GROSS, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-15^{1,2}, which are all of the claims pending in this application.

¹ In the final rejection (Paper No. 7, mailed September 13, 2001) the examiner rejected claims 1-15 under the judicially-created doctrine of Obviousness-type double patenting. We presume this rejection has been withdrawn by the examiner as the rejection has not been repeated in the examiner's answer. See Ex parte Emm, 118 USPQ 180, 181 (Bd. App. 1957).

² We observe that the examiner's answer sets forth (page 3) that "[c]laims 1-15 are rejected under 35 U.S.C. § 103(a). This rejection is set forth in prior Office Action, Paper No. 7." However, in the prior Office Action, only claims 1-4, 6-9, and 11-14 were rejected under 35 U.S.C. § 103(a). It is unclear as to why claims 1, 5, and 15 were not included in the prior Office Action.

BACKGROUND

Appellants' invention relates to a speech command recognition system with means for concurrent and modeless distinguishing between speech commands and speech queries for locating predetermined commands. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

1. An interactive computer controlled display system with speech command input comprising:

means for predetermining a plurality of speech commands each associated with a corresponding plurality of system actions,

means for concurrently detecting said predetermined speech commands and non-predetermined speech queries for locating commands,

means responsive to a predetermined detected speech command for carrying out the system action corresponding to the command, and

means responsive to a detected non-predetermined speech query for attempting to locate predetermined commands applicable to said query.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Morin et al. 5,748,841 May 5, 1998
(Morin)

Gould et al. 6,088,671 Jul. 11, 2000
(Gould) (effectively filed Nov. 13, 1995)

Claims 1-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gould in view of Morin.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejection, we make reference to the examiner's answer (Paper No. 12, mailed March 26, 2002) and the final rejection (Paper No. 7, mailed September 13, 2001) for the examiner's complete reasoning in support of the rejection, and to appellants' brief (Paper No. 11, filed January 22, 2002) for appellants' arguments thereagainst. Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered. See 37 CFR 1.192(a).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the brief along with the

examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we reverse. We begin with claim 1. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness.

Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (final rejection, page 4) is that "Gould et al do not specifically teach detecting non-predetermined speech queries for locating commands." To overcome this deficiency in Gould, the examiner turns to Morin for a teaching of "a computer speech recognition system which receives speech input from the user, processes the speech input and determines if the speech input is related or representative of valid commands, and identifies to the user said valid system commands applicable to a computer application or program (col. 19, line 20 - col. 20, line 64), for the purpose of allowing users unfamiliar with available commands of an application to progressively build sentences which will have meaning to the application (col. 1, lines 15-20)." The examiner asserts (id.) that it would have been obvious to process speech input to

determine if the speech input is related to or representative of valid commands, and identify to the user valid system commands as taught by Morin.

Appellants assert (brief, page 5) that in Gould, a speech query that is not recognized as a predetermined command would be considered as text to be typed. It is argued (brief, page 6) that even if Morin suggests using a speech query to locate a specific command, that there is no teaching of modifying Gould to include querying of commands. It is further asserted (brief, page 6) that there is no suggestion to modify Gould with Morin. Appellants argue (brief, page 7) that to modify Gould with Morin, an artisan would first have to determine how to perform the basic Gould functioning of distinguishing their commands from spoken text to be typed, and secondly to distinguish within the spoken text between text to be typed and speech queries which are to be used to locate commands.

From our review of Gould, it is clear (figures 4, 10 and 14) that if the spoken words are not recognized as commands, the spoken words are treated as text to be typed.

Turning to Morin, from our review of the reference, we do not agree with the examiner that Morin discloses identifying to the user valid system commands. Morin discloses (col. 4, lines

34-38) that "[i]t is also an object of the invention to provide a dialogue system which can propose choices for the user in the building of sentences or commands, the choices being arranged in order of plausibility given the existing dialogue context," and col. 4, lines 56-61) that "[t]he dialogue system provides a mechanism which allows a user to progressively acquire knowledge of the language and to progressively build a sentence or command without actually executing the command. In this way, a user can browse through the features of a target application without actually operating the application." From this disclosure of Morin, we find that the system provides choices for the user in building sentences or commands, and that this allows a user to progressively acquire knowledge of the language. Morin additionally discloses (col. 14, lines 51-55) that "[t]he dialogue context, dialogue model and the syntactic-semantic grammar work together to provide the user with commands which syntactically and semantically correct and which can be interpreted by the dialogue server in the current context" (underlining added). From this disclosure of Morin, it would appear, at first blush, that Morin provides the user with commands. However, Morin further discloses (col. 15, lines

54-59), that "[w]hen the user activates the language acquisition mode (if, for example the user does not know what to do for the next command), the dialogue system will present a list of words or 'completion list' which corresponds to the beginning words of all valid inputs that are syntactically and semantically correct." Morin further discloses (col. 16, lines 14-17) that the process continues until a complete syntactically and semantically correct command has been built and entered.

Moreover, Morin further discloses (col. 19, lines 21-24) that "[t]he Speech Language Acquisition mode allows users to get assistance on the next possible words when they use fragmented speech input with the microphone interactively. It is then possible to build legal commands word by word" (underlining added). From these disclosures of Morin, we find that Morin provides users with assistance on the next possible words when they use fragmented speech with the microphone interactively. Thus, upon input of spoken words, Morin provides the user with all possible next words that can be used to build a sentence or command, and that this process continues until the command or sentence is complete. Thus, although Morin helps the user in building sentences or commands, Morin does not identify to the user, valid system commands, as asserted by the examiner. For

example, in figure 3 of Morin, the speech completion tables reflect next words to be used by the user, and not a list of commands. In addition, we note that the claim recites "locate predetermined commands." From our review of Morin, we find no teaching or suggestion of locating predetermined commands. Because all of the possible permutations of commands that could be built using Morin's system are built from the various permutations of words provided, we find that the commands created from the spoken and suggested words cannot reasonably be considered to be "predetermined." In addition, we find no specific claim construction by the examiner that would allow for an interpretation of the claims that would read on locating predetermined commands by suggesting words that are used in a process that will ultimately create commands.

From all of the above, we find that because Morin only suggests next possible words and not predetermined commands, the combined teachings of Gould and Morin would not have suggested to an artisan "means responsive to a detected non-predetermined speech query for attempting to locate predetermined commands applicable to said query" as recited in claim 1. Accordingly, we find that the examiner has failed to establish a prima facie case of obviousness of claim 1. The rejection of

claim 1 under 35 U.S.C. § 103(a), and claims 2-5, dependent therefrom, is therefore reversed. In addition, as independent claims 6 and 11 also recite "locate predetermined commands" we reverse the rejection of claims 6 and 11, as well as claims 7-10 and 12-15, dependent therefrom.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-15 under 35 U.S.C. § 103(a) is reversed.

REVERSED

Lee E. Barrett
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Administrative Patent Judge)
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Anita Pellman Gross)
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